

## CLAIMS

### What is claimed is:

1. A method for an automated unmanned rental station for  
2 use in cooperation with a plurality of pieces of rental equipment  
stored in the automated unmanned rental station, each of the  
4 plurality of pieces of rental equipment having a radio frequency  
identification tag attached thereto, the method comprising:

6 (a) receiving user input through a user interface of a  
computer system associated with the automated unmanned rental  
8 station;

(b) receiving in an antenna in communication with said  
10 computer system, and located near a portal of the automated  
unmanned rental station, a first radio frequency identification  
12 signal from a first one of the plurality of pieces of rental  
equipment having a radio frequency identification tag moved  
14 through said portal;

(c) creating a first rental transaction record for said  
16 first one of the plurality of pieces of rental equipment moved  
through said portal utilizing data from an inventory database  
18 stored in said computer system that matches a first unique data  
interpreted from said first radio frequency identification  
20 signal; and

(d) altering a status in said inventory database of said  
22 first one of the plurality of pieces of rental equipment.

2. A method according to claim 1 further comprising:

2 receiving a user identification input through said user  
interface of said computer system.

3. A method according to claim 1 wherein said user  
2 interface of said computer system comprises at least one of a  
keyboard, a mouse, a voice command interpreted through speech  
4 recognition, a barcode reader, and a touch screen of a graphics  
display.

4. A method according to claim 1 further comprising:  
2 determining the validity of said user identification input.

5. A method according to claim 4 further comprising:  
2 when said user identification input is determined to be  
invalid, generating electronically an exception report having a  
4 date and time stamp; and  
sending automatically said exception report electronically  
6 to at least one predetermined location.

6. A method according to claim 1 further comprising:  
2 receiving a check-out equipment input through said user  
interface.

7. A method according to claim 6 further comprising:  
2 receiving a reference number input through said user  
interface; and

4 receiving a number of days input through said user  
interface.

8. A method according to claim 6 further comprising:

2 deactivating an alarm component of said computer system for  
a predetermined period of time after receiving said check-out  
4 equipment input.

9. A method according to claim 8 further comprising:

2 when said predetermined period of time has expired,  
reactivating said alarm component of said computer system.

10. A method according to claim 1 further comprising:

2 transmitting automatically said first rental transaction  
record from said computer system to at least one predetermined  
4 location.

11. A method according to claim 1 further comprising:

2 storing said first rental transaction record in said  
computer system; and

4 transmitting said first rental transaction record from said  
computer system to at least one predetermined location at a  
6 specified time.

12. A method according to claim 1 further comprising:

2 determining the validity of said first unique data.

13. A method according to claim 12 further comprising:

2 when said first unique data is determined to be invalid,  
generating electronically an exception report having a date and  
4 time stamp; and

sending automatically said exception report electronically  
6 to at least one predetermined location.

14. A method according to claim 1 wherein said first rental  
2 transaction record contains at least one of an equipment type, a  
reference number, a user identification number, a number of days  
4 checked out, a date, and a time.

15. A method according to claim 1 wherein said altered  
2 status in said inventory database of said first one of the  
plurality of pieces of rental equipment indicates that said first  
4 one of the plurality of pieces of rental equipment is checked  
out.

16. A method according to claim 1 further comprising:

2 repeating acts (b) through (d) for a second unique data  
interpreted from a second radio frequency identification signal  
4 from a second one of the plurality of pieces of rental equipment  
moved through said portal, wherein a second rental transaction  
6 record is created and a status in said inventory database of said



18. A method for an automated unmanned rental station for  
2 use in cooperation with a plurality of pieces of rental equipment  
stored in the automated unmanned rental station, each of the  
4 plurality of pieces of rental equipment having a radio frequency  
identification tag attached thereto, the method comprising:

6 (a) receiving user input through a user interface of a  
computer system associated with the automated unmanned rental  
8 station;

(b) receiving in an antenna in communication with said  
10 computer system, and located near a portal of the automated  
unmanned rental station, a first radio frequency identification  
12 signal from a first one of the plurality of pieces of rental  
equipment having the radio frequency identification tag moved  
14 through said portal;

(c) comparing a first unique data interpreted from said  
16 first radio frequency identification signal for said first one of  
the plurality of pieces of rental equipment moved through said  
18 portal to a plurality of rental transaction records in an  
inventory database stored in said computer system that matches  
20 said first unique data; and

(d) altering a status in said inventory database of said  
22 first one of the plurality of pieces of rental equipment.

19. A method according to claim 18 further comprising:

2 receiving a user identification input through said user  
interface of said computer system;

20. A method according to claim 18 wherein said user  
2 interface of said computer system comprises at least one of a  
keyboard, a mouse, a voice command interpreted through speech  
4 recognition, a barcode reader, and a touch screen of a graphics  
display.

21. A method according to claim 18 further comprising:  
2 determining the validity of said user identification input.

22. A method according to claim 21 further comprising:  
2 when said user identification input is determined to be  
invalid, generating electronically an exception report having a  
4 date and time stamp; and  
sending automatically said exception report electronically  
6 to at least one predetermined location.

23. A method according to claim 18 further comprising:  
2 receiving a return equipment input through said user  
interface.

24. A method according to claim 23 further comprising:  
2 deactivating an alarm component of said computer system for  
a predetermined period of time after receiving said return  
4 equipment input.

25. A method according to claim 24 further comprising:

2 when said predetermined period of time has expired,  
reactivating said alarm component of said computer system.

26. A method according to claim 18 further comprising:

2 when said first unique data does not match at least one of  
said plurality of rental transaction records in said inventory  
4 database stored in said computer system, generating  
electronically an exception report having a date and time stamp;  
6 and

8 sending automatically said exception report electronically  
to at least one predetermined location.

27. A method according to claim 18 wherein said altered

2 status in said inventory database of said first one of the  
plurality of pieces of rental equipment indicates that said first  
4 one of the plurality of pieces of rental equipment is checked in.

28. A method according to claim 27 further comprising:

2 entering electronically into a log a date and time said  
altered status of said first one of the plurality of pieces of  
4 rental equipment is indicated as checked in.

29. A method according to claim 27 further comprising:

2 generating an invoice with said computer system when said  
altered status in said inventory database of said first one of



4 the plurality of pieces of rental equipment indicates that said  
first one of the plurality of pieces of rental equipment is  
6 checked in.

30. A method according to claim 18 further comprising:

2 repeating acts (b) through (d) for a second unique data  
interpreted from a second radio frequency identification signal  
4 from a second one of the plurality of pieces of rental equipment  
moved through said portal, wherein said second unique data is  
6 compared to said plurality of rental transaction records in said  
inventory database stored in said computer system and a status in  
8 said inventory database of said second one of the plurality of  
pieces of rental equipment is altered.

31. A method for an automated unmanned rental station for  
2 use in cooperation with a plurality of pieces of rental equipment  
stored in the automated unmanned rental station, each of the  
4 plurality of pieces of rental equipment having a radio frequency  
identification tag attached thereto, the method comprising:

6 (a) receiving in an antenna in communication with a  
computer system associated with the automated unmanned rental  
8 station, and located near a portal of the automated unmanned  
rental station, a first radio frequency identification signal  
10 from a first one of the plurality of pieces of rental equipment  
having a radio frequency identification tag moved through said  
12 portal;

(b) comparing a first unique data interpreted from said  
14 first radio frequency identification signal for said first one of  
the plurality of pieces of rental equipment moved through said  
portal to a plurality of rental transaction records in an  
16 inventory database stored in said computer system that matches  
said first unique data; and  
18

(c) altering a status in said inventory database of said  
20 first one of the plurality of pieces of rental equipment.

32. A method according to claim 31 further comprising:

2 activating an alarm component of said computer system after  
receiving said first unique data; and

4 beginning a timed countdown for a predetermined period of  
time for said alarm component to sound.

33. A method according to claim 32 further comprising:

2 deactivating said alarm component of said computer system  
when said predetermined period of time expires.

34. A method according to claim 31 wherein said altered

2 status in said inventory database of said first one of the  
plurality of pieces of rental equipment indicates that said first  
4 one of the plurality of pieces of rental equipment is checked in.

35. A method according to claim 34 further comprising:

2 entering electronically into a log a date and time said  
altered status of said first one of the plurality of pieces of  
4 rental equipment is indicated as checked in.

36. A method according to claim 34 further comprising:

2 generating an invoice with said computer system when said  
altered status in said inventory database of said first one of  
4 the plurality of pieces of rental equipment indicates that said  
first one of the plurality of pieces of rental equipment is  
6 checked in.

37. A method according to claim 31 further comprising:

2 when said first unique data does not match at least one of  
said plurality of rental transaction records in said inventory  
4 database stored in said computer system, generating

electronically an exception report having a date and time stamp;

6 and

8 sending automatically said exception report electronically  
to at least one predetermined location.

38. A method according to claim 31 further comprising:

2 repeating acts (a) through (c) for a second radio frequency  
identification signal from a second one of the plurality of  
4 pieces of rental equipment moved through said portal, wherein  
said second radio frequency identification signal is compared to  
6 said plurality of rental transaction records in said inventory  
database stored in said computer system and a status in said  
8 inventory database of said second one of the plurality of pieces  
of rental equipment is altered.

39. A method for an automated unmanned rental station for  
2 use in cooperation with a plurality of pieces of rental equipment  
stored in the automated unmanned rental station, each of the  
4 plurality of pieces of rental equipment having a radio frequency  
identification tag attached thereto, the method comprising:

6 (a) receiving in an antenna in communication with a  
computer system associated with the automated unmanned rental  
8 station, and located near a portal of the automated unmanned  
rental station, a first radio frequency identification signal  
10 from a first one of the plurality of pieces of rental equipment  
having the radio frequency identification tag moved through said  
12 portal;

(b) comparing a first unique data interpreted from said  
14 first radio frequency identification signal for said first one of  
the plurality of pieces of rental equipment moved through said  
16 portal to an inventory list of a plurality of pieces of rental  
equipment in an inventory database stored in said computer system  
18 that matches said first unique data; and

(c) creating a first rental transaction record for said  
20 first one of the plurality of pieces of rental equipment moved  
through said portal utilizing data from said inventory database  
22 stored in said computer system that matches said first unique  
data; and

24 (d) altering a status in said inventory database of said  
first one of the plurality of pieces of rental equipment.

40. A method according to claim 39 further comprising:

2 activating an alarm component of said computer system after  
receiving said first unique data; and

4 beginning a timed countdown for a predetermined period of  
time for said alarm component to sound.

41. A method according to claim 40 further comprising:

2 deactivating said alarm component of said computer system  
when said predetermined period of time expires.

42. A method according to claim 39 wherein said altered

2 status in said inventory database of said first one of the  
plurality of pieces of rental equipment indicates that said first  
4 one of the plurality of pieces of rental equipment is checked  
out.

43. A method according to claim 42 further comprising:

2 generating an invoice with said computer system based on  
said first rental transaction record.

44. A method according to claim 39 further comprising:

2 transmitting automatically said first rental transaction  
record from said computer system to at least one predetermined  
4 location.

45. A method according to claim 39 further comprising:

2 storing said first rental transaction record in said  
computer system; and

4 transmitting said first rental transaction record from said  
computer system to at least one predetermined location at a  
6 specified time.

46. A method according to claim 39 further comprising:

2 when said first unique data does not match at least one of  
said plurality of pieces of rental equipment in said inventory  
4 list in said inventory database stored in said computer system,  
generating electronically an exception report having a date and  
6 time stamp; and

8 sending automatically said exception report electronically  
to at least one predetermined location.

47. A method according to claim 39 further comprising:

2 repeating acts (a) through (d) for a second unique data  
interpreted from a second radio frequency identification signal  
4 from a second one of the plurality of pieces of rental equipment  
moved through said portal, wherein said second unique data is  
6 compared to said plurality of pieces of rental equipment in said  
inventory list in said inventory database stored in said computer  
8 system and a second rental transaction record is created and a  
status in said inventory database of said second one of the  
10 plurality of pieces of rental equipment is altered.

48. A method according to claim 39 wherein said first  
2 rental transaction record contains at least one of an equipment  
type, a date, and a time.

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49. A method for an automated unmanned rental station for  
2 use in cooperation with a plurality of pieces of rental equipment  
stored in the automated unmanned rental station, each of the  
4 plurality of pieces of rental equipment having a radio frequency  
identification tag attached thereto, the method comprising:

6 (a) receiving in an antenna in communication with a  
computer system associated with the automated unmanned rental  
8 station, and located near a portal of the automated unmanned  
rental station, a first radio frequency identification signal  
10 from a first one of the plurality of pieces of rental equipment  
moved through said portal;

12 (b) receiving a user identification input through a user  
interface of said computer system;

14 (c) comparing a first unique data interpreted from said  
first radio frequency identification signal for said first one of  
16 the plurality of pieces of rental equipment moved through said  
portal to a plurality of rental transaction records in an  
18 inventory database stored in said computer system that matches  
said first unique data; and

20 (d) altering a status of said first one of the plurality of  
pieces of rental equipment in said inventory database.

50. A method according to claim 49 further comprising:  
2 determining the validity of said user identification input.

51. A method according to claim 50 further comprising:

2       when said user identification input is determined to be  
invalid, generating electronically an exception report having a  
4   date and time stamp; and  
      sending automatically said exception report electronically  
6   to at least one predetermined location.

52.   A method according to claim 49 wherein said user  
2   interface of said computer system comprises at least one of a  
keyboard, a mouse, a voice command interpreted through speech  
4   recognition, a barcode reader, and a touch screen of a graphics  
display.

53.   A method according to claim 49 further comprising:  
2       activating an alarm component of said computer system after  
receiving said first unique data; and  
4       beginning a timed countdown for a first predetermined period  
of time for said alarm component to sound.

54.   A method according to claim 53 further comprising:  
2       receiving a return equipment input through said user  
interface of said computer system.

55.   A method according to claim 54 further comprising:  
2       deactivating said alarm component of said computer system  
for a second predetermined period of time after receiving said

4 return equipment input through said user interface of said  
computer system.

56. A method according to claim 55 further comprising:  
2 storing in said computer system said first unique data.

57. A method according to claim 56 further comprising:  
2 repeating acts (c) and (d) for a second unique data  
interpreted from a second radio frequency identification signal  
4 stored in said computer system from a second one of the plurality  
of pieces of rental equipment moved through said portal, wherein  
6 said second unique data is compared to said plurality of rental  
transaction records in said inventory database stored in said  
8 computer system and a status in said inventory database of said  
second one of the plurality of pieces of rental equipment is  
10 altered.

58. A method according to claim 55 further comprising:  
2 when said second predetermined period of time has expired,  
reactivating said alarm component of said computer system.

59. A method according to claim 55 further comprising:  
2 when a second unique data interpreted from a second radio  
frequency identification signal from a second one of the  
4 plurality of pieces of rental equipment moved through said portal  
is received before said second predetermined period of time has

6 expired, repeating acts (c) and (d) for said second unique data,  
wherein said second unique data is compared to said plurality of  
8 rental transaction records in said inventory database stored in  
said computer system and a status in said inventory database of  
10 said second one of the plurality of pieces of rental equipment is  
altered.

60. A method according to claim 49 wherein said user  
2 interface of said computer system comprises at least one of a  
keyboard, a mouse, a voice command interpreted through speech  
4 recognition, a barcode reader, and a touch screen of a graphics  
display.

61. A method according to claim 49 wherein said altered  
2 status in said inventory database of said first one of the  
plurality of pieces of rental equipment indicates that said first  
4 one of the plurality of pieces of rental equipment is checked in.

62. A method according to claim 61 further comprising:  
2 generating an invoice with said computer system when said  
altered status in said inventory database of said first one of  
4 the plurality of pieces of rental equipment indicates that said  
first one of the plurality of pieces of rental equipment is  
6 checked in.

63. A method according to claim 61 further comprising:

2 entering electronically into a log a date and time said  
altered status of said first one of the plurality of pieces of  
4 rental equipment is indicated as checked in.

64. A method according to claim 49 wherein said plurality  
2 of rental transaction records further comprise an inventory list  
of a plurality of pieces of rental equipment having a status  
4 indicating that said plurality of pieces of rental equipment are  
checked out.

65. A method for an automated unmanned rental station for  
2 use in cooperation with a plurality of pieces of rental equipment  
stored in the automated unmanned rental station, each of the  
4 plurality of pieces of rental equipment having a radio frequency  
identification tag attached thereto, the method comprising:

6 (a) receiving in an antenna in communication with a  
computer system associated with the automated unmanned rental  
8 station, and located near a portal of the automated unmanned  
rental station, a first radio frequency identification signal  
10 from a first one of the plurality of pieces of rental equipment  
moved through said portal;

12 (b) receiving a user identification input through a user  
interface of said computer system;

14 (c) receiving a check-out equipment input through said user  
interface of said computer system; and

16 (d) creating a first rental transaction record for said  
first one of the plurality of pieces of rental equipment moved  
18 through said portal utilizing data from said inventory database  
stored in said computer system that matches a first unique data  
20 interpreted from said first radio frequency identification  
signal; and

22 (e) altering a status of said first one of the plurality of  
pieces of rental equipment in an inventory database stored in  
24 said computer system.

66. A method according to claim 65 further comprising:

2 determining the validity of said user identification input.

67. A method according to claim 66 further comprising:

2 when said user identification input is determined to be  
invalid, generating electronically an exception report having a  
4 date and time stamp; and

sending automatically said exception report electronically  
6 to at least one predetermined location.

68. A method according to claim 65 further comprising:

2 receiving a reference number input through said user  
interface; and

4 receiving a number of days input through said user  
interface.

69. A method according to claim 65 further comprising:

2 activating an alarm component of said computer system after  
receiving said first unique data; and

4 beginning a timed countdown for a first predetermined period  
of time for said alarm component to sound.

70. A method according to claim 69 further comprising:

2 deactivating said alarm component of said computer system  
for a second predetermined period of time after receiving said  
4 check-out equipment input through said user interface.

71. A method according to claim 70 further comprising:

2 when said second predetermined period of time has expired,  
reactivating said alarm component of said computer system.

72. A method according to claim 70 further comprising:

2 when a second unique data interpreted from a second radio  
frequency identification signal from a second one of the  
4 plurality of pieces of rental equipment moved through said portal  
is received before said second predetermined period of time has  
6 expired, repeating acts (d) and (e) for said second unique data,  
wherein a status in said inventory database of said second one of  
8 the plurality of pieces of rental equipment is altered.

73. A method according to claim 70 further comprising:

2 storing in said computer system said first unique data.

74. A method according to claim 65 further comprising:

2 determining the validity of said first unique data.

75. A method according to claim 74 further comprising:

2 when said first unique data is determined to be invalid,  
generating electronically an exception report having a date and  
4 time stamp; and

sending automatically said exception report electronically  
6 to at least one predetermined location.



76. A method according to claim 65 wherein said first  
2 rental transaction record contains at least one of an equipment  
type, a user reference number, a user identification number, a  
4 number of days checked out, a date, and a time.

77. A method according to claim 65 further comprising:  
2 repeating acts (d) and (e) for a second unique data  
interpreted from a second radio frequency identification signal  
4 stored in said computer system from a second one of the plurality  
of pieces of rental equipment moved through said portal, wherein  
6 a status in said inventory database of said second one of the  
plurality of pieces of rental equipment is altered.

78. A method according to claim 65 wherein said user  
2 interface of said computer system comprises at least one of a  
keyboard, a mouse, a voice command interpreted through speech  
4 recognition, a barcode reader, and a touch screen of a graphics  
display.

79. A method according to claim 65 wherein said altered  
2 status in said inventory database of said first one of the  
plurality of pieces of rental equipment indicates that said first  
4 one of the plurality of pieces of rental equipment is checked  
out.

80. A method according to claim 65 further comprising:

2 generating an invoice with said computer system based on  
said first rental transaction record.

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81. An automated unmanned rental station for use in  
2 cooperation with a plurality of pieces of rental equipment stored  
in the automated unmanned rental station, each of the plurality  
4 of pieces of rental equipment having a radio frequency  
identification tag attached thereto, the automated unmanned  
6 rental station comprising:

at least one antenna for tracking the movement of the  
8 plurality of pieces of rental equipment through a portal of the  
automated unmanned rental station, wherein said at least one  
10 antenna receives a radio frequency identification signal for each  
of the plurality of pieces of rental equipment having the  
12 attached radio frequency identification tag when moved through  
said portal; and

14 a computer system in communication with said at least one  
antenna, said computer system having a user interface for  
16 allowing interaction between at least one user and an equipment  
rental software loaded into a memory of said computer system,  
18 said equipment rental software further comprising,

a radio frequency identification tracking module for  
20 interpreting a unique data from each of said radio  
frequency identification signals received by said at least  
22 one antenna,

an inventory database module for storing a data on  
24 each of the plurality of pieces of rental equipment,  
wherein each of said unique data corresponds to a one of

26       said data for a one of said plurality of pieces of rental  
equipment, and

28           a reporting module for generating at least one report  
regarding a rental activity of the plurality of pieces of  
30       rental equipment.

82.   An automated unmanned rental station according to claim  
2   81 further comprising:

      a user identification device;

4       an alarm for generating audible sound; and

      said equipment rental software further comprises,

6           a security alarm module for controlling said alarm,

      a user identification module for receiving input from  
8       said at least one user through said user identification  
device and for authenticating said at least one user,

10       an automated billing module for generating at least  
one invoice based on said rental activity of the plurality  
12       of pieces of rental equipment, and

      a communication module for transferring said at least  
14       one report regarding said rental activity of the plurality  
of pieces of rental equipment to at least one external  
16       location.

83.   An automated unmanned rental station according to claim  
2   81 wherein said user interface of said computer system comprises  
at least one of a keyboard, a mouse, a voice command interpreted

4 through speech recognition, a barcode reader, and a touch screen  
of a graphics display, and further wherein said equipment rental  
6 software further comprises a user interface module for  
controlling the interaction between said at least one user and  
8 said equipment rental software.

84. An automated unmanned rental station according to claim  
2 81 wherein when a first one of the plurality of pieces of rental  
equipment is moved through said portal, a first rental  
4 transaction record is created.

85. An automated unmanned rental station according to claim  
2 81 wherein said portal is one of a doorway, a gate, or a pass  
through opening.

86. An automated unmanned rental system, the system  
2 comprising:

at least one unmanned rental site, said at least one  
4 unmanned rental site further comprising,

a plurality of pieces of rental equipment stored in an  
6 automated unmanned rental station located at said at least  
one unmanned rental site, wherein each of the plurality of  
8 pieces of rental equipment has a radio frequency  
identification tag attached thereto,

10 at least one antenna for tracking the movement of the  
plurality of pieces of rental equipment through a portal of  
12 the automated unmanned rental station, wherein said at  
least one antenna receives a radio frequency identification  
14 signal for each of the plurality of pieces of rental  
equipment having the attached radio frequency  
16 identification tag when moved through said portal, and

a computer system in communication with said at least  
18 one antenna, said computer system having a user interface  
for allowing interaction between at least one user and an  
20 equipment rental software loaded into a memory of said  
computer system;

22 a central rental processing center, said central rental  
processing center further comprising a central rental processing  
24 center computer system having a central rental processing center  
software loaded into a memory of said central rental processing  
26 center computer system; and

a communications medium for allowing communication between  
28 said computer system at said at least one unmanned rental site  
and said central rental processing center computer system at said  
30 central rental processing center, wherein said central rental  
processing center computer system at said central rental  
32 processing center receives over said communications medium at  
least one report regarding a rental activity generated by said  
34 computer system at said at least one unmanned rental site.

87. An automated unmanned rental system according to claim  
2 86 wherein said equipment rental software further comprises:

a radio frequency identification tracking module for  
4 interpreting said unique signals received from said at least one  
antenna;

an inventory database module for storing a data on each of  
the plurality of pieces of rental equipment, wherein each of said  
8 unique data corresponds to a one of said data for a one of said  
plurality of pieces of rental equipment; and

a reporting module for generating said at least one report  
10 regarding said rental activity from said at least one unmanned  
12 rental site.

88. An automated unmanned rental system according to claim  
2 86 wherein said central rental processing center computer system  
at said central rental processing center receives over said  
4 communications medium at least one exception report regarding a

rental activity generated by said computer system at said at  
6 least one unmanned rental site.

89. An automated unmanned rental system according to claim  
2 86 wherein said central rental processing center computer system  
generates at least one invoice for said rental activity of said  
4 at least one report.

90. An automated unmanned rental system according to claim  
2 86 wherein said communications medium is one of an intranet, the  
Internet, a LAN, a WAN, a wireless communication network, and a  
4 satellite communication network.

91. An automated unmanned rental system according to claim  
2 86 wherein said at least one unmanned rental site further  
comprises:

4 a user identification device;  
an alarm for generating audible sound; and  
6 said equipment rental software further comprises,  
a security alarm module for controlling said alarm,  
8 a user identification module for receiving input from  
said at least one user through said user identification  
10 device and for authenticating said at least one user, and  
a communication module for transferring said at least  
12 one report regarding said rental activity to said central



rental processing center computer system at said central  
rental processing center.

14

92. An automated unmanned rental system according to claim  
2 86 wherein said user interface of said computer system comprises  
at least one of a keyboard, a mouse, a voice command interpreted  
4 through speech recognition, a barcode reader, and a touch screen  
of a graphics display, and further wherein said equipment rental  
6 software further comprises a user interface module for  
controlling the interaction between said at least one user and  
8 said equipment rental software.

93. An automated unmanned rental system according to claim  
2 86 wherein said portal is one of a doorway, a gate, or a pass  
through opening.

94. A method for an automated unmanned rental system for  
2 use in cooperation with at least one unmanned rental site having  
a plurality of pieces of rental equipment, wherein each of the  
4 plurality of pieces of rental equipment has a radio frequency  
identification tag attached thereto, the method comprising:

6 (a) loading a central rental processing center software on  
a central rental processing center computer;

8 (b) receiving in said central rental processing center  
computer a plurality of data uploaded from the at least one  
10 unmanned rental site;

(c) processing said plurality of data and posting a portion  
12 of said plurality of data to at least one subsystem;

(d) adding at least one additional piece of equipment  
14 having a radio frequency identification tag attached thereto to  
an inventory database, and assigning said at least one additional  
16 piece of equipment to a one of the at least one unmanned rental  
site;

18 (e) removing at least one of the plurality of pieces of  
rental equipment having a radio frequency identification tag  
20 attached thereto from said inventory database; and

(f) generating at least one management report based on said  
22 plurality of data uploaded from the at least one unmanned rental  
site.

95. A method according to claim 94 wherein said at least  
2 one subsystem is an accounting subsystem and further comprising:

generating at least one invoice based on said portion of  
4 said plurality of data posted to said accounting subsystem.

96. A method according to claim 94 wherein said at least  
2 one subsystem is an inventory subsystem and further comprising:  
generating at least one inventory report based on said  
4 portion of said plurality of data posted to said inventory  
subsystem.

97. A method according to claim 94 wherein said plurality  
2 of data further comprises transaction data stored in a  
transaction data file captured by a computer system at the at  
4 least one unmanned rental site.

98. A method according to claim 97 wherein said plurality  
2 of data is uploaded from the at least one unmanned rental site to  
said central rental processing center computer under the control  
4 of a communication software loaded on said central rental  
processing center computer and loaded on said computer system at  
6 the at least one unmanned rental site.

99. A method according to claim 97 wherein said processing  
2 act further comprises:  
determining if a first transaction data in said transaction  
4 data file has a missing data;

when said transaction data file has said missing data,  
6 extracting said first transaction data into an exception report;  
and

8 when said transaction data file has no said missing data,  
extracting said first transaction data into an edit list.

100. A method according to claim 94 further comprising:

2 repeating acts (b) and (c) for a next plurality of data  
uploaded from the at least one unmanned rental site, processing  
4 said next plurality of data, and posting a portion of said next  
plurality of data to said at least one subsystem.

101. A method according to claim 94 further comprising:

2 repeating acts (d) and (e) for adding a plurality of  
additional pieces of equipment to said inventory database, and  
4 for removing a plurality of pieces of rental equipment from said  
inventory database.